

# GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service United States Department of Agriculture

MAY 1, 2003

				<u>O</u>	<u>cean</u>
TM GRAIN TRANSPORT COST INDICATORS	<u>Truck</u>	<u>Rail</u>	<u>Barge</u>	Gulf	PNW
Indicator Value* for 05/01	101	107	46	112	108
Compared to Last Week	•	<b></b>	•	<b></b>	unchanged
*Indicator: Base Year 2000=100; W	eekly Updates	s include Truck	x=Diesel; Rail=	Nearby Se	condary Rail

\*Indicator: Base Year 2000=100; Weekly Updates include Truck=Diesel; Rail=Nearby Secondary Rail Market; Barge=Spot Illinois River Basis; Ocean Vessel based on Routes to Japan

May 4-6	North America Rail Shippers Assoc. Annual Mtg.	Washington, DC	202-639-2100 (ph)
May 4-8	World Rail Expo 2003	Dallas, TX	703-241-8514 (ph) 703-241-8589 (fax) home@resa.org
May 5-7	American Feed Association Expo 2003	Minneapolis, MN	703-524-0810(ph) afia@afia.org
May 18-20	2003 World Congress, A New Age In Agriculture Working Together to Create the Future and Disable The Barriers	St. Louis, MO	314-206-3208 (ph) 314-206-3222 (fax)
June 22-25	American Seed Trade Association Annual Convention	Henderson, NV	888-890-7333 (ph) 703-837-8140 )ph)
July 13-18	28 <sup>th</sup> Annual Summer Ports, Waterways, Freight And International Trade Conference	Portland, Oregon	Joey Cambridge 202-334-2000 jcambridge@ngs.edu
July 20-22	U.S. Grains Council, 43 <sup>rd</sup> Annual Board of Directors Meeting; 4 <sup>th</sup> International Grain Marketing Conference And Trade Show	Minneapolis, MN	202-789-0789 (ph) 202-898-0522 (fax) grains@grains.org
July 27-30	America Agricultural Economics Association Annual Meeting	Montreal, Quebec Canada	515-233-3202
Sept. 24-26	National Waterways Conference Annual Meeting	Houston, TX	202-296-4415 (ph) 202-835-3861
Sept. 28-Oct. 3	2003 American Association of Port Authorities (AAPA) Annual Convention	Curacao, Netherlands Antilles	703-684-5700 (ph) 703-684-6321 info@aapa.ports.org

Report is prepared by Deen Olowolayemo, Hooshang Fazel, Johnny Hill and Karl Hacker, Agricultural Economists, Transportation & Marketing, Agricultural Marketing Service, USDA (202) 690-1304. Support provided by Upper Great Plains Transportation Institute, North Dakota State University. This report can be found on the Internet at www.ams.usda.gov/tmd/grain.htm. E-mail comments and questions to Surajudeen.Olowolayemo@usda.gov.

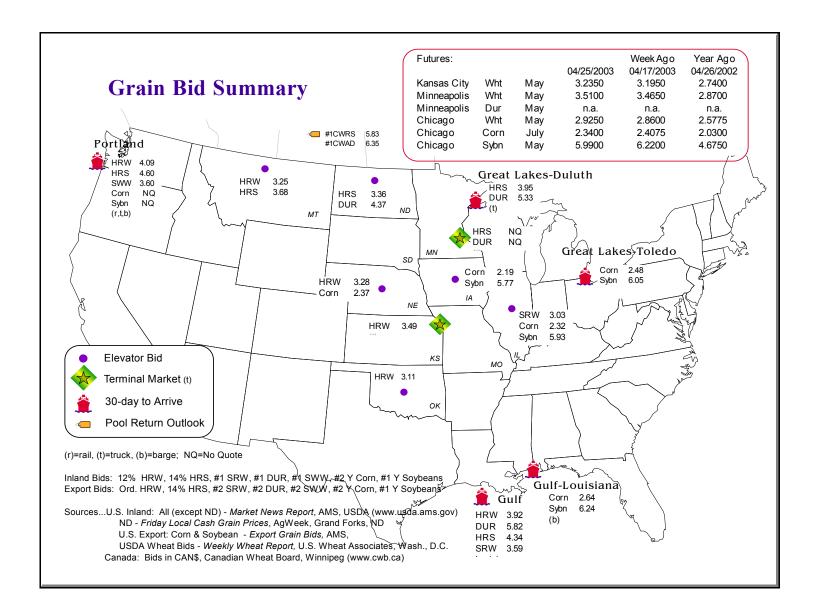
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The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

Market Update: U.S. Origins to Export Position Price Spreads (Per Bushel)					
Commodity	OriginDestination	This week	Last week		
Corn	IL Gulf	-0.32	-0.31		
Corn	NE Gulf	-0.27	-0.26		
Soybean	IA Gulf	-0.47	-0.50		
HRW	KS Gulf	-0.43	-0.47		
HRS	ND Portland	-1.24	-1.21		

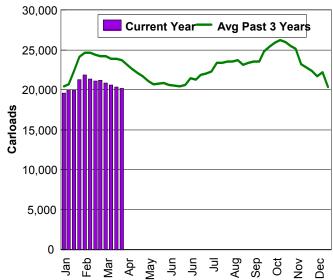
The **Grain Bid Summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.



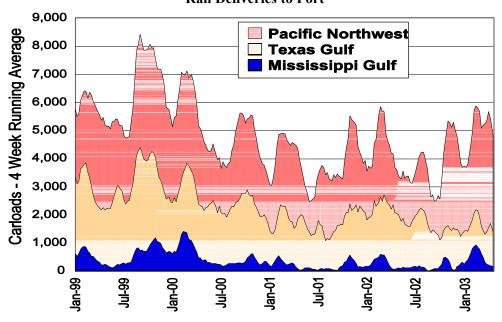
### **RAIL TRANSPORTATION**

Rail Deliveries to Port (Carloads)						
	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total	
Week Ending:						
04/09/03	123	1,446	2,656	285	4,510	
04/16/03	2	487	3,016	99	3,604	
YTD 2003	7,841	18,290	55,216	8,279	89,626	
YTD 2002	5,114	31,535	34,886	9,641	81,176	
% YTD 2002	153%	58%	158%	86%	110%	
Total 2002	11,112	83,799	111,719	21,551	228,181	
Total 2001	10,022	81,804	111,376	26,604	229,806	
Source: Transport	ation & Marke	eting/AM	S/USDA: (*)	Incomplete Da	ta	

# Grain Car Loadings for Class I Railroads



### **Rail Deliveries to Port**



Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Class I Rail Carrier Grain Car Bulletin (Grain Carloads Originated and Grain Service Index)

NS 3,457 2,770	7,552 5,732	230 561	<b>UP</b> 5,722 6,478	19,446 18,188	CN 3,232 4,404	<b>CP</b> 3,385 3,279
	Í		· ·	,		· ·
2,770	5,732	561	6,478	18,188	4,404	3,279
						_
51,452	125,105	5,805	103,316	331,384	54,843	55,494
51,147	123,178	10,002	108,524	339,960	64,355	59,380
101%	102%	58%	95%	97%	85%	93%
164,745	400,179	27,161	344,296	1,079,141	191,835	195,765
	51,147 101%	51,147 123,178 101% 102% 0 164,745 400,179	51,147     123,178     10,002       101%     102%     58%       0 164,745     400,179     27,161	51,147     123,178     10,002     108,524       101%     102%     58%     95%       0 164,745     400,179     27,161     344,296	51,147     123,178     10,002     108,524     339,960       101%     102%     58%     95%     97%       0 164,745     400,179     27,161     344,296     1,079,141	51,147     123,178     10,002     108,524     339,960     64,355       101%     102%     58%     95%     97%     85%       0 164,745     400,179     27,161     344,296     1,079,141     191,835

U.S. Rail Covered Hopper Cars Online Index\*
April-03 95.5 101.7

Source: Association of American Railroads; \*Base Year = 2001, Index based on Number of Covered Hopper Cars Online (available for Service).

92.6

91.4

94.4

Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

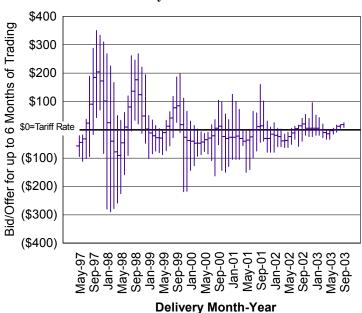
Railroad Car 'Auction' Results Average Premium/Discount to Tariff, \$/Car - Last Auction					
Delivery for:	Jun-03	Jul-03	Aug-03		
COT/N. Grain	no bid	no bid	no bid		
COT/S. Grain	no bid	no bid	\$0		
GCAS/Region 1	no bid	no bid	no bid		
GCAS/Region 2	no bid	no bid	no bid		

Source: Transportation & Marketing/AMS/USDA.

COT=Certificate of Transportation; GCAS=Grain Car Allocation System

Secondar	y Rail Car	Market				
Average Pre	emium/Disco	unt to Tariff,	\$/Car - Las	st Week		
	Delivery Period					
	May-03	Jun-03	Jul-03	Aug-03		
BNSF-GF	\$(19)	\$(13)	\$(6)	\$4		
UP-Pool	\$(5)	\$(1)	\$6	\$17		

### **Secondary Rail Market Bid**



#### **Tariff Rail Rates for Unit Train Shipments**

April 2003

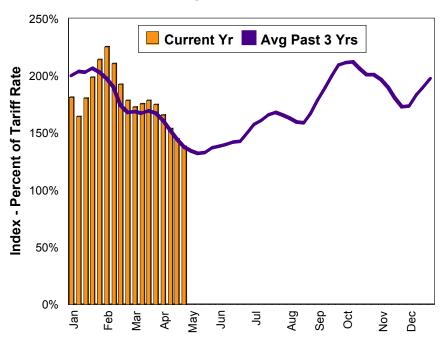
Date Effective	Tariff Item	Commodity	Origin	Destination	Rate Per Car	Rate Per MT	Rate/Per Bushel*
				Destination			
04/07/03	45560	Wheat	Minneapolis, MN	Houston, TX	\$2,050	\$22.60	\$0.62
04/07/03	43521	Wheat	Minneapolis, MN	Portland, OR	\$3,877	\$42.74	\$1.16
04/07/03	46540	Wheat	Kansas City, MO	Houston, TX	\$1,650	\$18.19	\$0.50
04/07/03	43586	Wheat	Kansas City, MO	Portland, OR	\$4,420	\$48.72	\$1.33
04/07/03	43581	Wheat	Omaha, NE	Portland, OR	\$4,005	\$44.15	\$1.20
04/07/03	31005	Corn	Minneapolis, MN	Portland, OR	\$3,050	\$33.62	\$0.85
04/07/03	31035	Corn	Kansas City, MO	Portland, OR	\$2,700	\$29.76	\$0.76
04/07/03	31005	Corn	Omaha, NE	Portland, OR	\$2,850	\$31.42	\$0.80
04/07/03	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,030	\$33.40	\$0.91
04/07/03	61110	Soybean	Omaha, NE	Portland, OR	\$2,780	\$30.64	\$0.83

Source: www.bnsf.com

Approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

### **BARGE TRANSPORTATION**

### Illinois River Barge Rate Index - Rate Quotes



The Illinois River Barge Rate Index averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The Index, along with Rate Quotes and Futures Market bids are indicators of grain transport supply and demand.

Calculating **Barge Rate** Per Ton: Index × 1976 Tariff Benchmark Rate per Ton

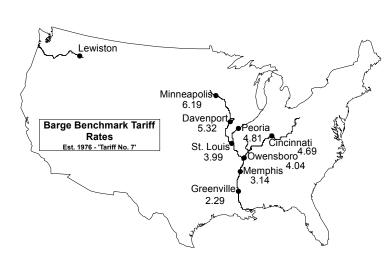
Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

BARGE RATE QUOTES: Southbound Barge Freight Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate						
	4/23/03	4/16/03	May '03	July '03		
Twin Cities	173	184	176	189		
Mid-Mississippi	145	155	147	165		
Illinois River	129	138	137	155		
St. Louis	91	97	100	129		
Lower Ohio	117	120	120	136		
Cairo-Memphis	91	97	97	120		
Source: Transportation	n & Marketing	/AMS/USD/	A			

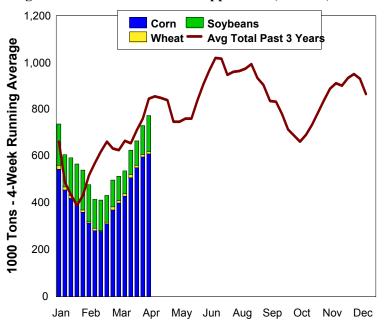
# BARGE FUTURES MARKET Southbound Barge Freight Nominal/Cash Basis Values

Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

			Rate		
Week ended	River/Region	Contract Period	Futures	Cash	
4/29/03	St. Louis	May	n/a	113	
		July	n/a	135	
		Sept	n/a	180	
		Nov	n/a	153	
		Dec	n/a	135	
	Illinois River	May	n/a	128	
		July	n/a	150	
		Sept	n/a	185	
		Nov	n/a	170	
		Dec	n/a	165	



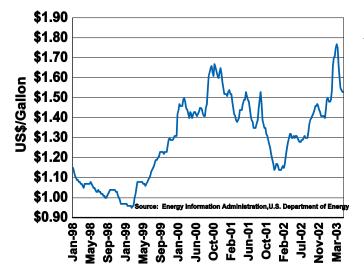
### Barge Movements on the Mississippi River (Lock 27)



	<u>Corn</u>	<b>Wht</b>	<b>Sybn</b>	<b>Total</b>		
Mississippi River						
Rock Island, IL (L15)	273	9	72	355		
Winfield, MO (L25)	363	5	171	539		
Alton, IL (L26)	513	9	200	724		
Granite City, IL (L27)	498	9	191	700		
Illinois River (L8)	79	0	8	86		
<b>Ohio River (L52)</b> 18 0 17 44						
<b>Arkansas River (L1)</b> 0 2 4 7						
2003 YTD	7,813	536	3,297	14,004		
2002 YTD	10,226	676	3,513	15,072		
% of 2002 YTD	76%	79%	94%	93%		
Total 2001	31,878	2,679	10,616	47,091		

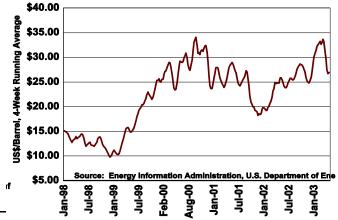
### TRUCK TRANSPORTATION

### Weekly U.S. Retail Road Diesel Price



The weekly <b>Diesel Price</b> provides a proxy for trends in U.S
truck rates. Diesel fuel is a significant expense for truck grain
movements, accounting for 37% of the estimated variable cost.
<b>Crude Oil Price</b> is an indicator in future diesel price trends.

### Weekly Brent Crude Price, Friday Close



Crude Oil Prices (04/29/03)<br/>US\$ per BarrelThis WeekLast WeekLight Sweet Crude (NYMEX)25.0628.10Brent Crude22.9425.77

Note: Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London.

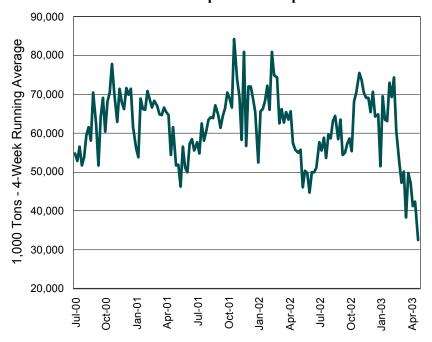
Source: www.eia.doe.gov; \*U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

# **GRAIN EXPORTS**

U.S. Export Balances (1,000 Metric Tons)									
-	Wheat					1	Total		
	HRW	SR W	HRS	SW W	DUR	A 11			
04/17/2003	1,063	339	1,215	541	207	3,365	5,431	3,105	11,901
This Week Year Ago	1,005	697	639	409	65	2,816	6,281	2,613	11,710
Commulative Exports-C	rop Year								
02/03 YTD	6,231	2,648	5,703	3,132	640	18,354	25,283	24,515	68,152
01/02 YTD	7,629	4,805	4,898	2,800	1,051	21,183	28,841	23,717	73,741
01/02 Total	8,761	5,485	5,582	3,175	1,133	24,135	48,003	29,926	102,064
00/01 Total	9,314	4,445	5,775	5,156	1,130	25,819	47,734	27,567	101,120
99/00 Total	10,629	4,195	5,590	4,055	984	25,453	48,760	26,972	101,185
Source: Foreign Agricultural Service YTD-Year-to-Date (www.fas.usda.gov)									

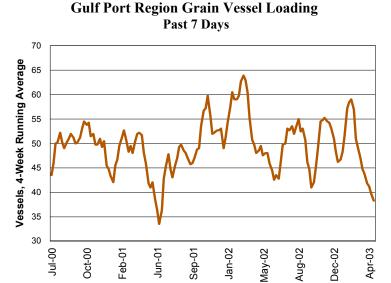
Select U.S. Port Regions - Grain Inspections for Export (1,000 Metric Tons)												
	<u>Pac</u>	ific Reg	<u>ion</u>	Mis	ssissippi (	<u>Gulf</u>	Ţ	exas Gu	<u>lf</u>	<u>P</u>	ort Region Tota	<u>ıl</u>
	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Pacific	Mississippi	Texas
04/24/03	162	59	59	31	455	223	22	0	0	280	708	22
2003 YTD	2,541	1,893	2,161	1,488	8,560	8,384	1,378	526	50	6,596	18,432	1,954
2002 YTD	3,018	1,675	970	2,118	11,987	7,903	2,069	106	235	5,663	22,008	2,410
% of 2002 YTD	84%	113%	223%	70%	71%	106%	67%	495%	21%	116%	84%	81%
2002 Total	10,007	5,877	1,639	6,829	34,991	17,996	6,971	468	468	17,523	59,816	7,906
Source: Federal	Source: Federal Grain Inspection Service YTD-Year-to-Date											

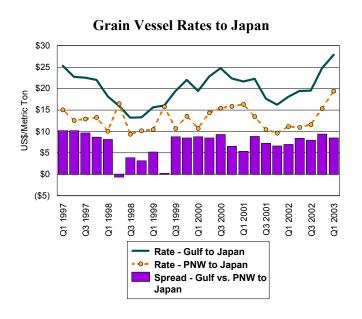
### **U.S. Grain Inspected for Export**



Select Canadian Port Export Inspections 1,000 Metric Tons, Week End Summary							
04/17/2003 Vancouver	Wheat 11	<u>Durum</u>	Barley 4				
Prince Rupert							
Prairie Direct	17		1				
Thunder Bay							
St. Lawrence	3,460	1,798	256				
2001/02 YTD	8,878	2,283	711				
2002/03 YTD	3,488	1,798	261				
% of Last Year	255%	127%	272%				
Source: Canadian Grains Commission, Crop Year 8/1-7/31							

]	Gulf		Pacific Northwest	Vancouver B.C.							
]	L 0 0 d 0 d			2.0.							
	Loaded	Due Next	Loaded Due Next								
Port '	7-Days	<u>10-Days</u>	In Port	In Port							
11	34	43	9	5							
18	35	50	13	9							
555) (	(3366)	(4482)	(315)	(012)							
35	51	65	8	5							
	11 18 555) ( 35	11 34 18 35 555) (3366) 35 51	11     34     43       18     35     50       555)     (3366)     (4482)       35     51     65	11     34     43     9       18     35     50     13       555)     (3366)     (4482)     (315)							





Quarterly Ocean Freight Rates Average Rates & Percentage Changes, U.S. Dollars/Metric Ton									
			_			%			
		2002	%	2003		Chang			
1 s	t Qtr	1st Qtr	Change	1 <sup>st</sup> Qtr	1st Qtr	e			
Gulf to				Pacific NW to					
Japan \$2	7.91	\$18.25	53%	Japan \$19.43	\$11.31	72%			
Mexico	-	\$31.49	-						
Venezuela \$1	5.00	-	-						
N. Europe \$1	4.50	\$10.67	36%	Argentina/Brazil to	0				
N. Africa	-	\$17.58	-	Med. Sea \$25.35	\$17.85	42%-			
Med. Sea \$1	4.50	\$10.97	32%	N. Europe -	\$13.48	-			
				Japan -	\$25.59	-			

Ocean Freight Rates for Selected Shipments - week ending 4/26/03								
Export Region	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate (\$Ton)			
G. Lakes	North Korea	Heavy Grain	May 25/30	1,500	\$155.00*			
G. Lakes	North Korea	Grains Bggd	May 25/30	3,000	\$155.00*			
U.S. Gulf	Angola	Wheat	Apr. 25/May 5	9,620	\$99.91*			
U.S. Gulf	Kenya	Sorghums Bggd	Spot	4,000	\$237.40*			
U.S. Gulf	Pakistan	Wheatflour Bggd	Apr. 25/30	4,989	\$120.00*			
U.S. Gulf	Pakistan	Wheatflour Bggd	May 20/30	9,600	\$329.85*			
U.S. Gulf	Kuwait	Milled Rice Bggd	Spot	25,000	\$180.61 <sup>*</sup>			
Brazil	Venezuela	Grains	Apr. 26/30	25,250	\$32.00			

Source: Maritime Research Inc.

Rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

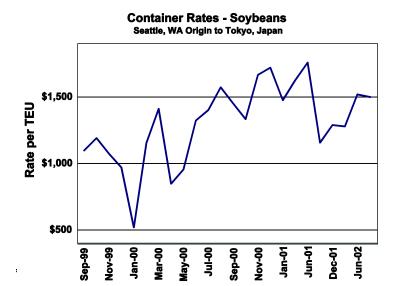
\*Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are of limited availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.

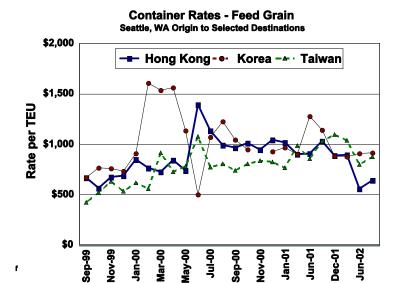
### **Container Ocean Freight Rates**

CONTAINER

Average Rate per TEU, Weighed by Shipping Line Market Share

Source: Transportation & Marketing/AMS/USDA, Quarterly Updates





Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.